

## Trace Metals in Natural Bottled Water on Montenegrin Market and Comparison with Tap Water in Podgorica

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**Abstract :** Many different chemicals may occur in drinking water and cause significant human health risks after prolonged periods of exposure. In particular concern are contaminants that have cumulative toxic properties, such as heavy metals. This investigation was done to clarify concerns about chemical quality and safety of drinking tap water in Podgorica. For comparison, all available natural bottled water on Montenegrin market were bought. All samples (bottled water and tap water from Podgorica) were analyzed using ICP -OES on contents of Al, Cd, Pb, Cu, Zn,Cr, Fe, As and Mn. All results compared with the maximum concentration levels allowed by international standards and World Health Organization (WHO) guidelines. The results of analysis showed that all trace of heavy metals were very low and in same time below MCL according to WHO and International standard.

**Keywords :** inductively coupled plasma - optical emission spectrometry (ICP-OES), Montenegro (Podgorica), natural bottled water, tap water ,trace of heavy metal

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